

ABSTRACT

5 A method of optimizing performance of a well system utilizes a neural
network. In a described embodiment, the method includes the step of
accumulating data indicative of the performance of the well system in response to
variable influencing parameters. The data is used to train a neural network to
model an output of the well system in response to the influencing parameters. An
output of the neural network may then be input to a valuing model, e.g., to permit
10 optimization of a value of the well system. The optimization process yields a set
of prospective influencing parameters which may be incorporated into the well
system to maximize its value.

2005-1323-011803